

B, BamHI; Bg, BglII; E, EcoRI; H, HindIII; Nc, NcoI; P, PstI; S, SalI

FIG. 1

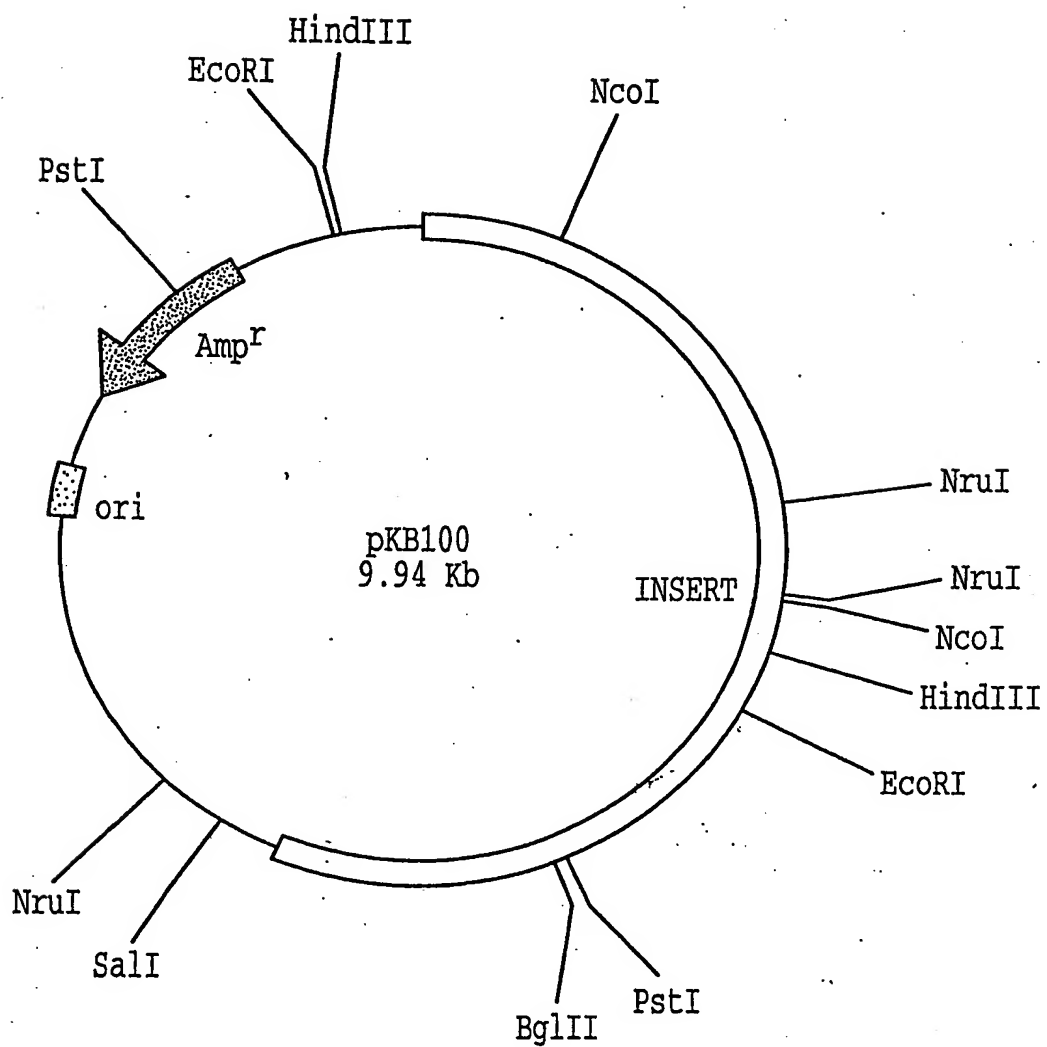


FIG. 2

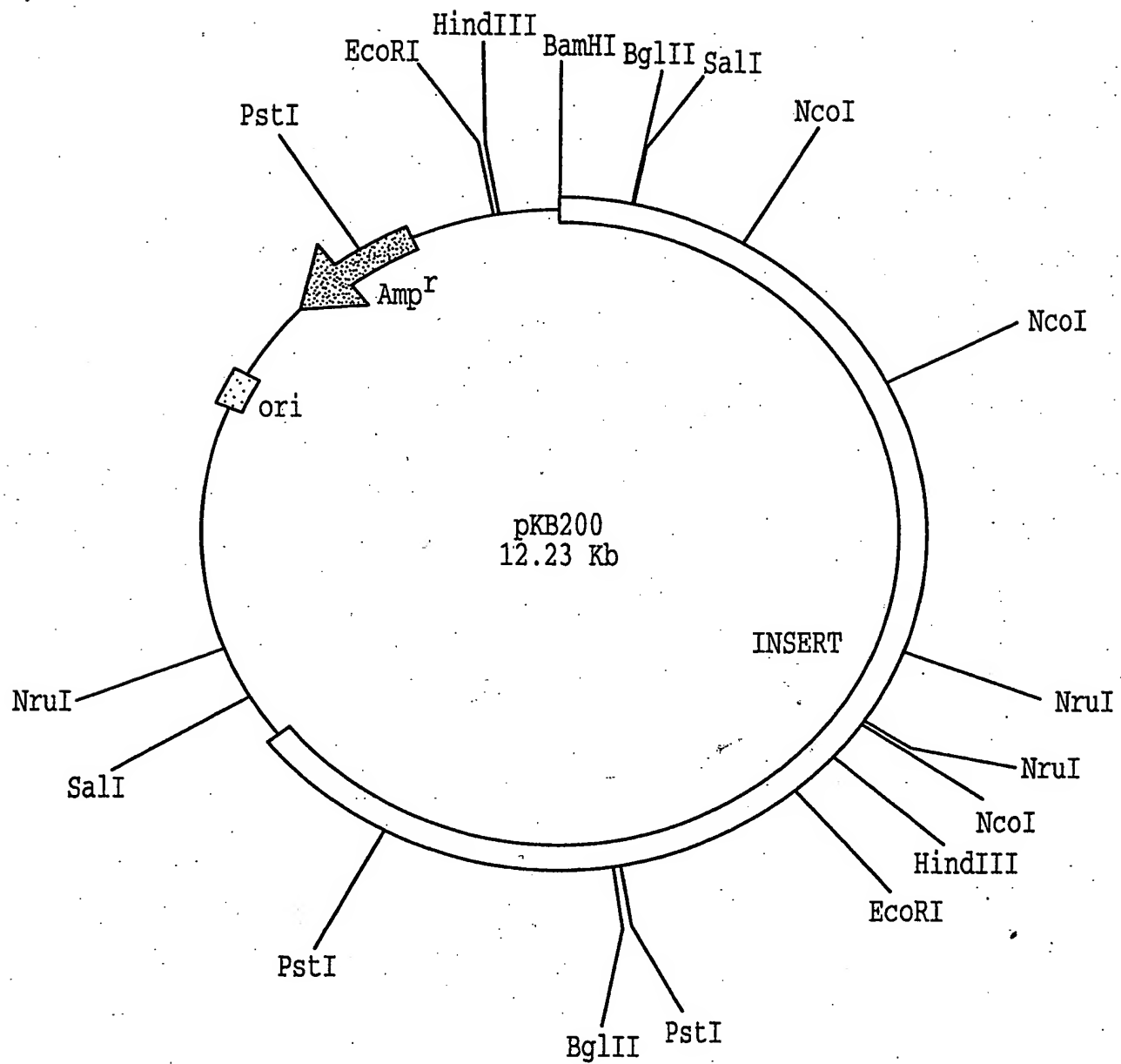
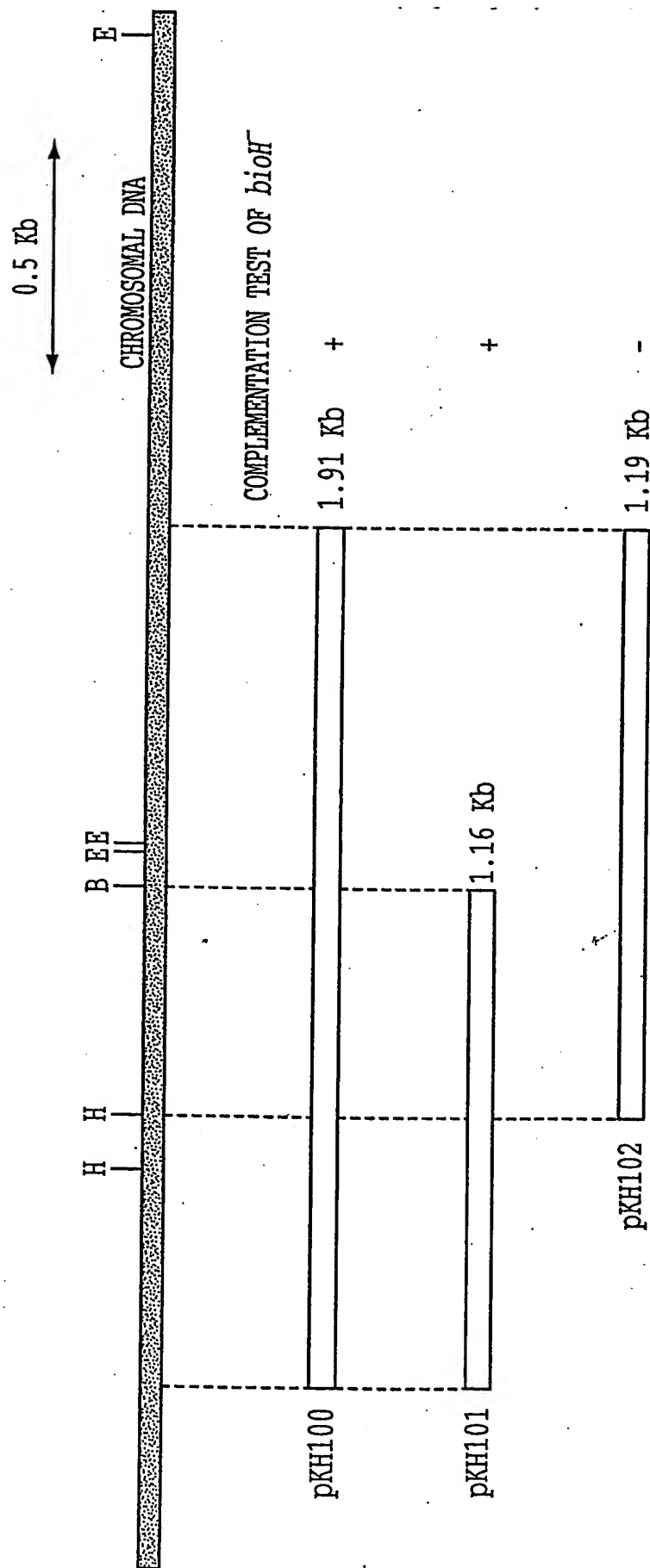


FIG. 3



B, BamHI; E, EcoRI; H, HindIII

FIG. 4

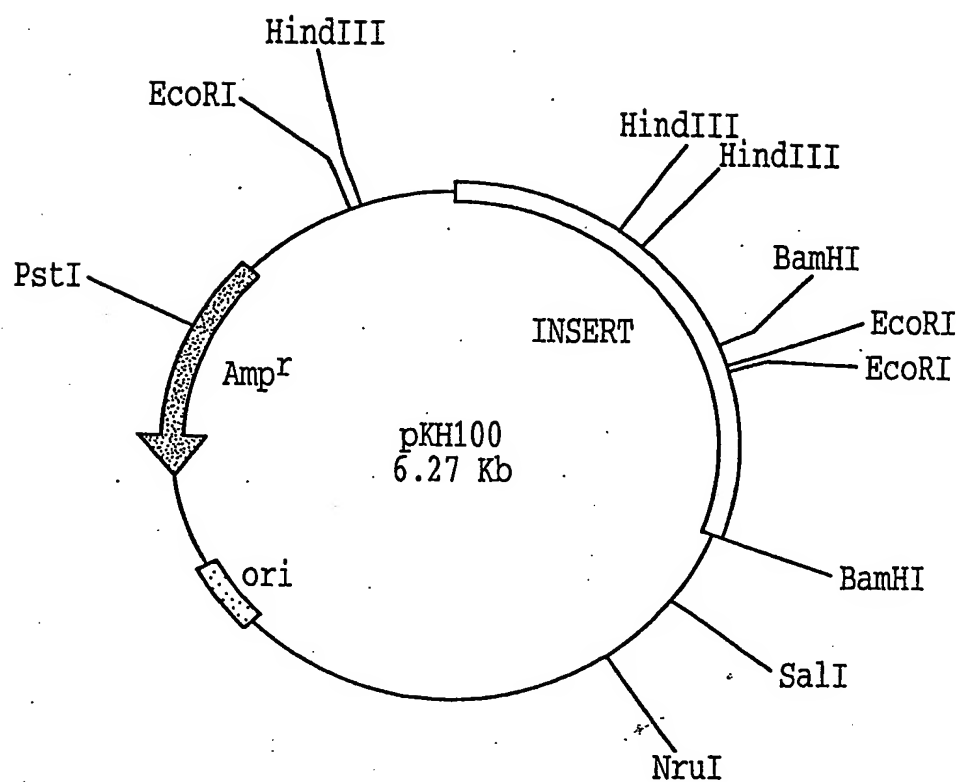
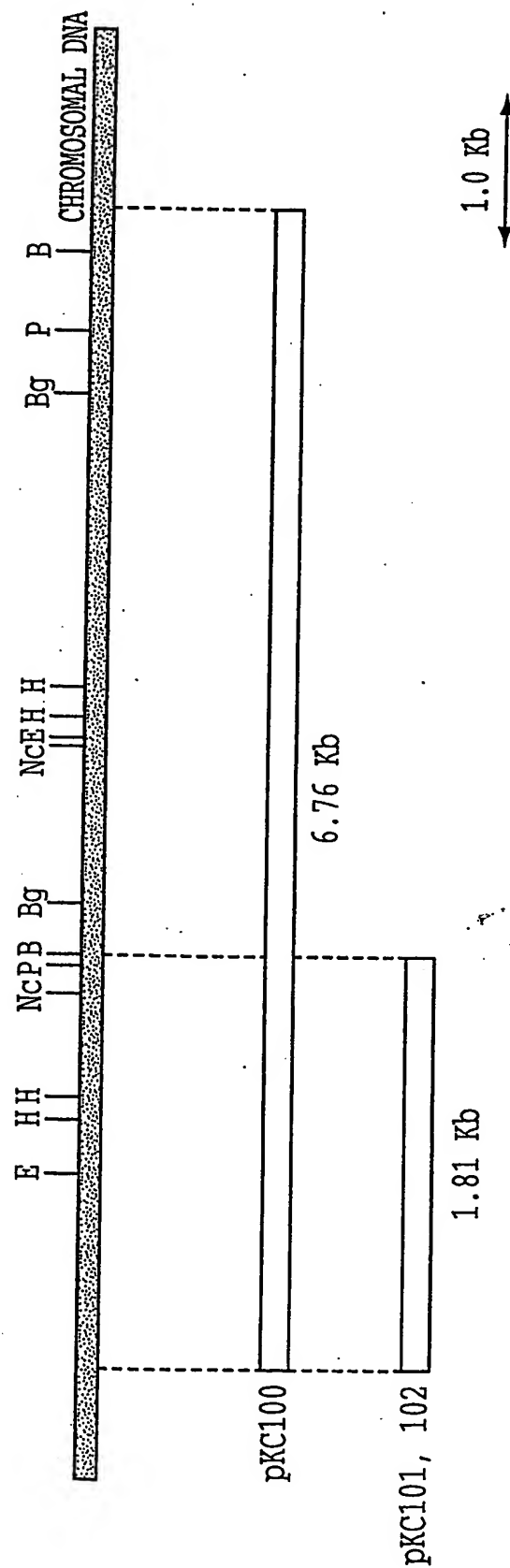


FIG. 5



B, BamHI; Bg, BglII; E, EcoRI; H, HindIII; Nc, NcoI; P, PstI

FIG. 6

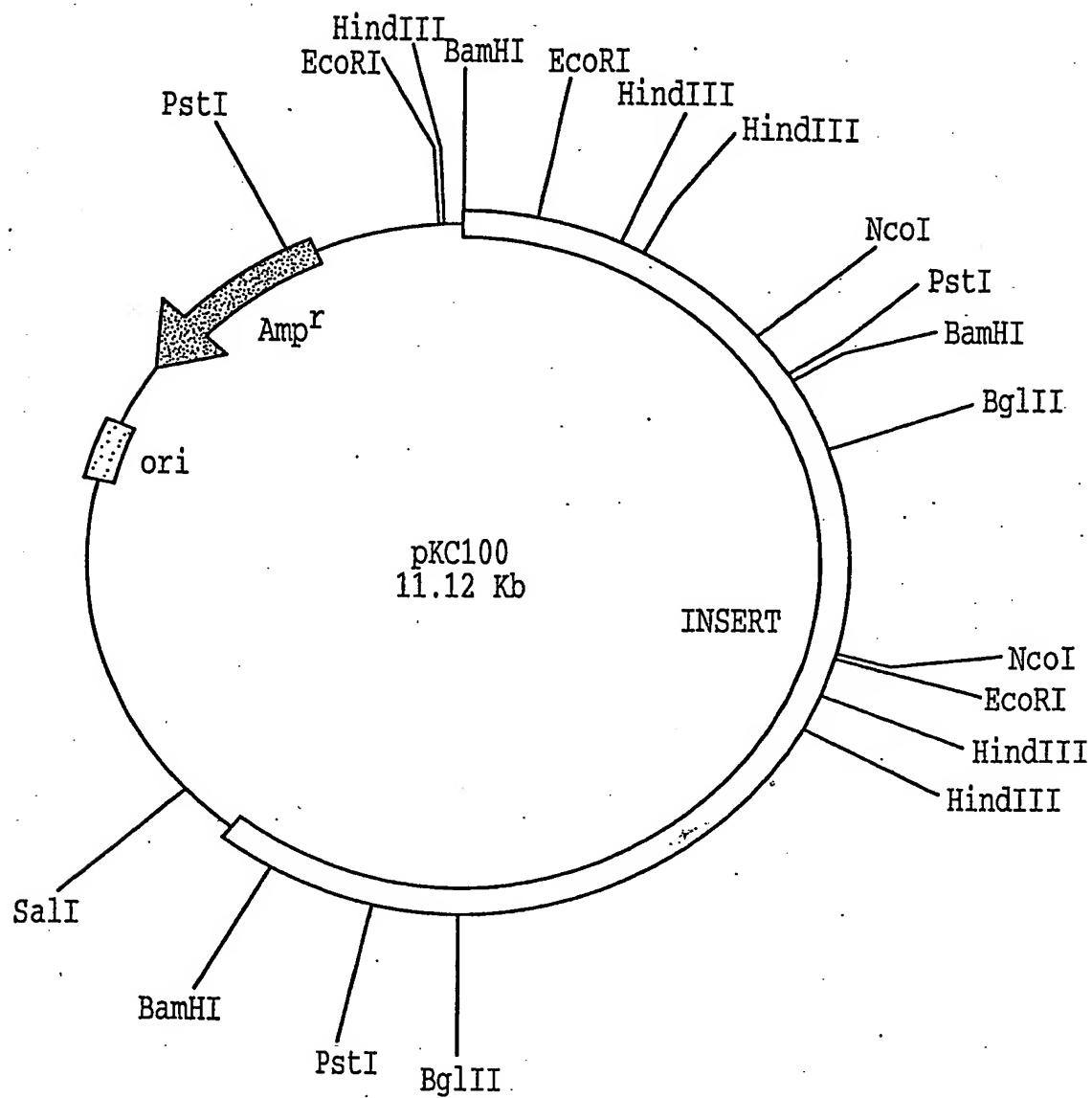
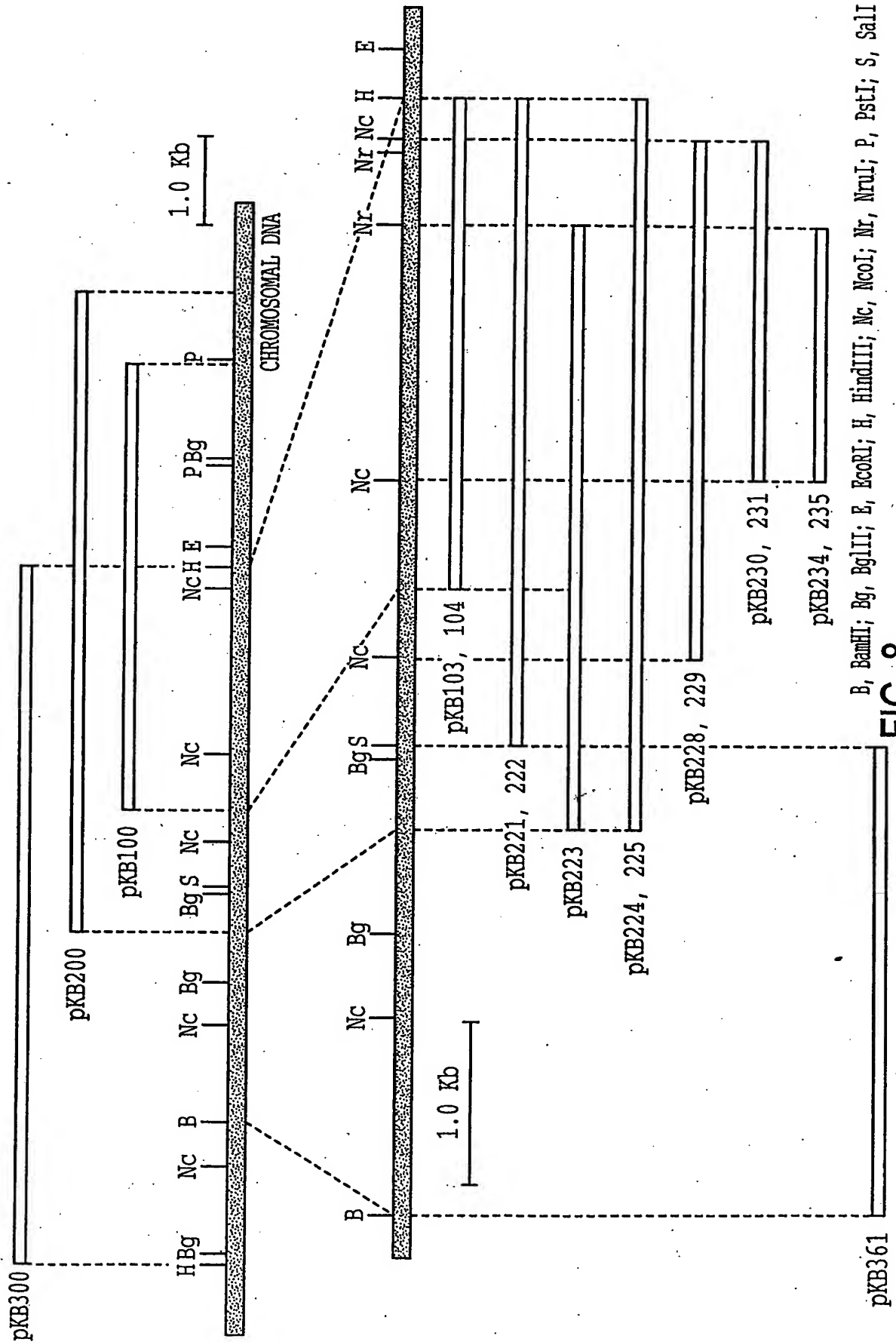


FIG. 7

8
G
F

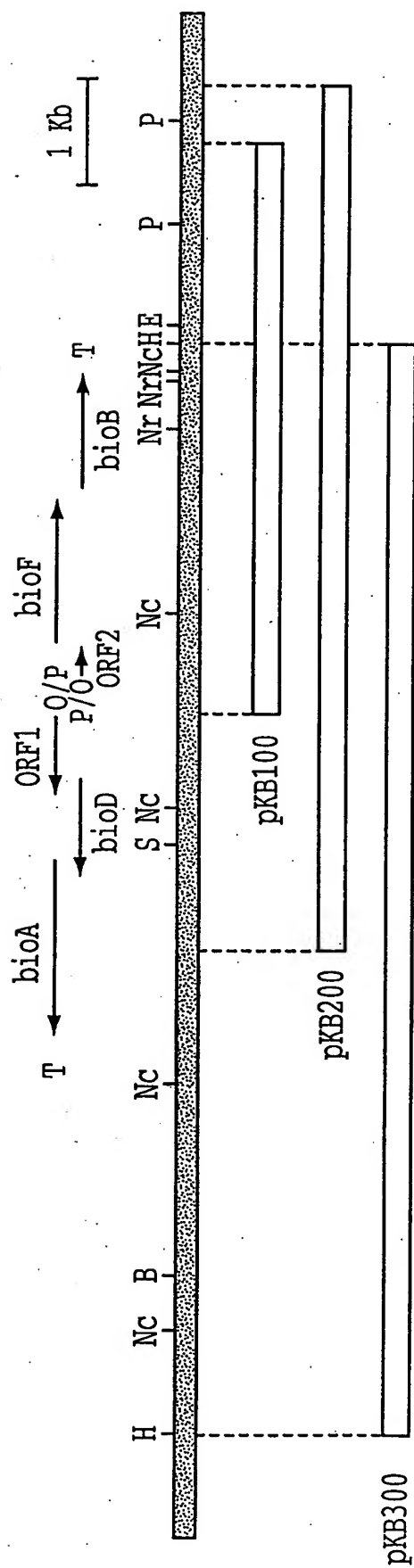


FIG. 9A

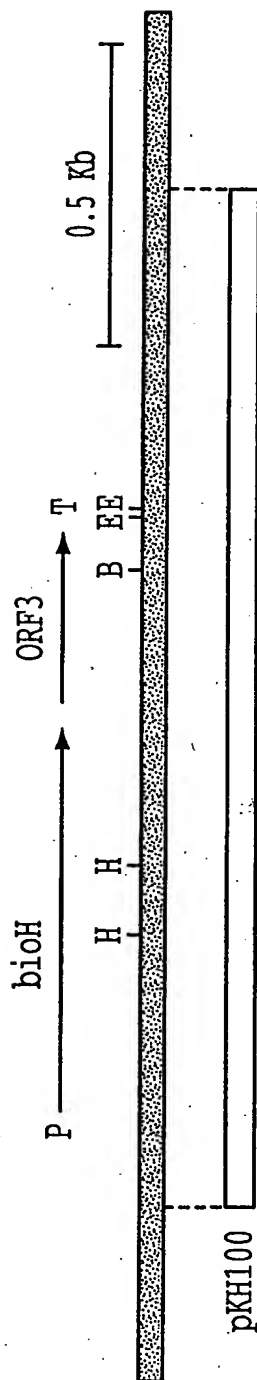


FIG. 9B

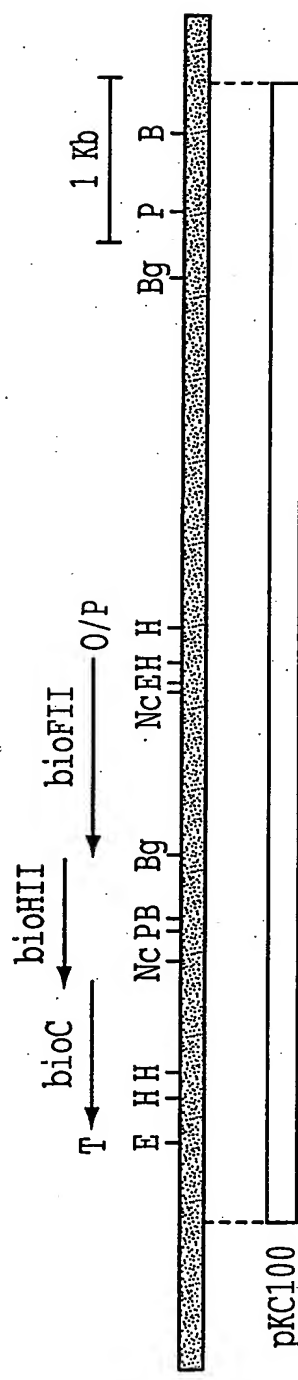


FIG. 9C

5' CGCCAATGGCAGTTAACGCAGTAAATAGGGCAACATAAGAGATCGTTTTAGCTTTCAAGT 60
GCGGTTACCGTCAATTGCGTCATTTATCCCGTTGTATTCTCTAGCAAAATCGAAA**GTTCA**
A G I A T L A T F L A V Y S I T K A K L
←-----ORF1
TTTCAACCTCCTTTTTTTTAAATTTGGTAGGTAAAATGCCCACTATTAGTGTGCATGATTT 120
AAAGTTGGAGGAAAAAAATTTTAACCATCCATTTTACGGGTGATAATCACACGTACTAAA
RBS
Box1
ATATTTTATATGTCAACCATTTATTATTTTAGTTAACATATAAAGCGCAATTAAAATGAC 180
-----→ ←-----
TATAAAATATACAGTTGGTAAATAATAAAATCAATTGTATATTTTCGCGTTAATTTTACTG
-35 -10
AGACTTAGAAAAATATTGAAAATTAGTAATGAACAATATTTTATTTGTGTGTTATTATA 240
TCTGAATCTTTTTTATAACTTTTAATCATTAACTTGTATATAAAATAAACACACAATAATAT
-10
Box2 RBS
CAATTTATATGTTAACATTTTAAAGATATAGTTAACATATAAAGGCTTGGAGGGAACAAA 300
-----→ ←-----
GTAAATATACAATTGATAAAATCTATATCAATTGTATATTTCCGAACCTCCCTTGTTT
-35
ORF2 -----→
M T G E M L I Q D E L S R E T A V F V A
TATGACAGGAGAAATGTTAATACAGGATGAACCTTCCAGAGAAACAGCGGTATTTGTGGC 360
ATACTGTCCTCTTTACAATTATGTCCTACTTGAAAGGTCTCTTTGTGCGCCATAAACACCG 5'

FIG. 10

Applicant(s): Yasuhiro FURUICHI, *et al.*
Parent Serial No.: 10/033,078
For: BIOTIN BIOSYNTHETIC GENES

ACTAACCCCTATGGTGTCCAGATTAAGCGTAATGTAGTATAGGATTTTAGTCAATTAGCA 60

-35 -10
ATTTTTGAAATATTTAGTACGATCACATAATTAGAATCATATATAATGATTAAAATATTAA 120

RBS
TTACAGAAAAGAGGTATTTTCATGCCATTCGTAAATCATGACAATGAAAGCCTTTACTAT 180
M P F V N H D N E S L Y Y
bioH ----->

GAGGTTCACGGACAAGGTGATCCTTTATTGTTGATTATGGGGCTCGGCTATAACTCTTTA 240
E V H G Q G D P L L L I M G L G Y N S L

FIG. 11

}

CGCAAAACGTGAACTCGTTTCAACGGAATTCGCCGAGCAGCCATGGCTTATGATCAACG 300
Q K R E L V S T E F A E Q P W L M I N G

FIG. 12

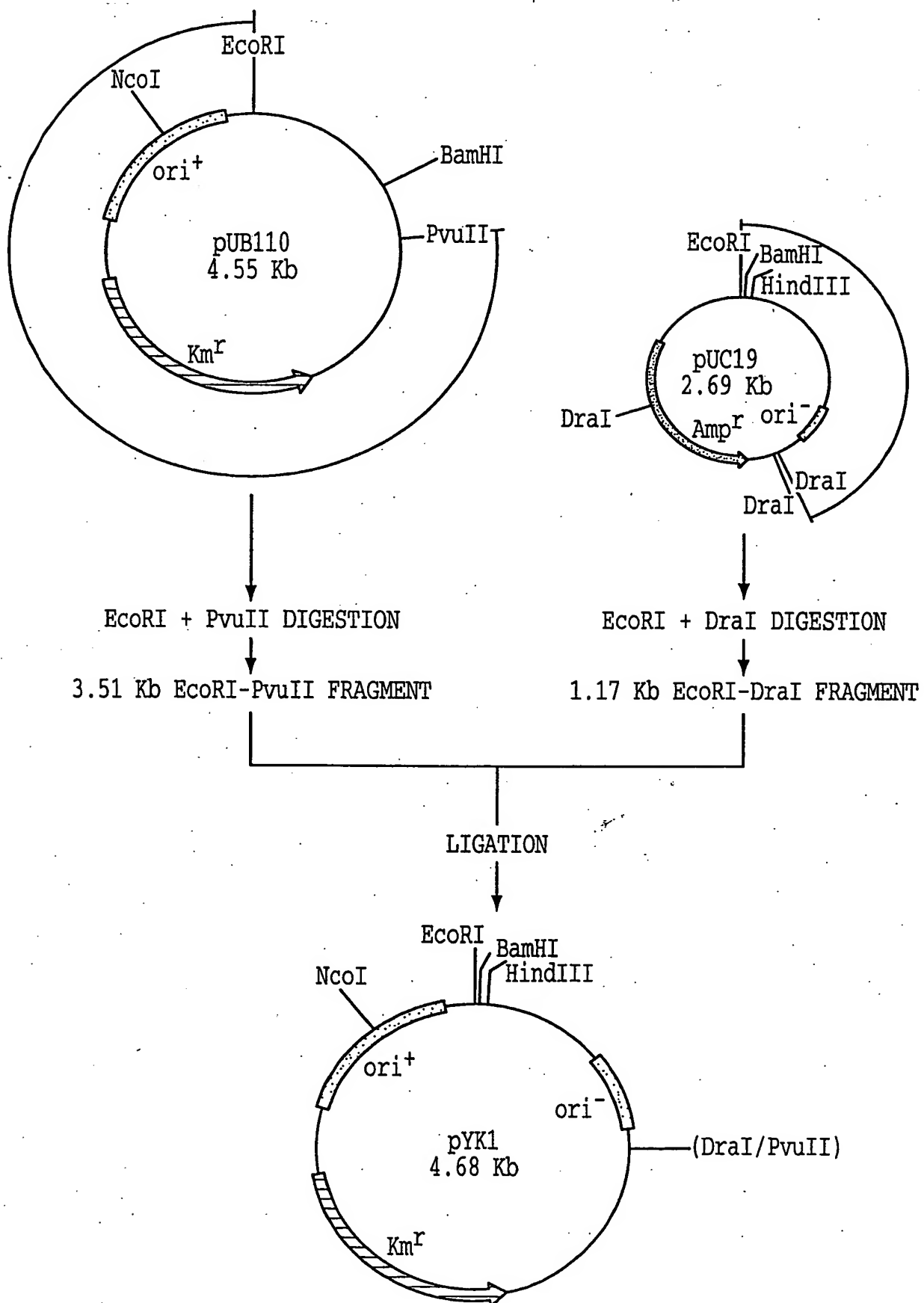


FIG. 13

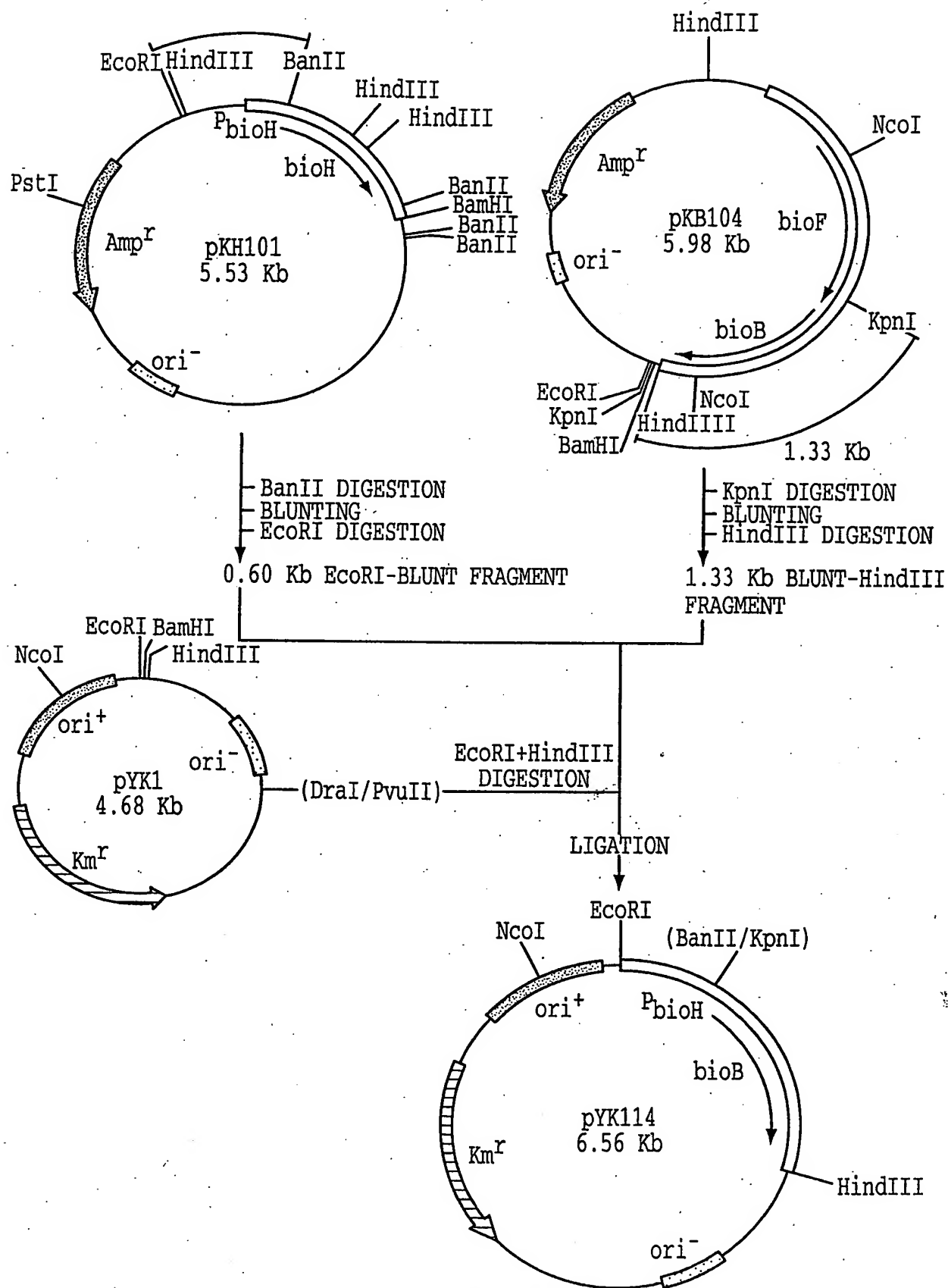


FIG. 14